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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/693,644 | 10/27/2003 | Simon Richard Jones | 604-698 | 8921 |
| 23117 | 7590 | 07/12/2004 | EXAMINER | |
| NIXON & VANDERHYE, PC 1100 N GLEBE ROAD 8TH FLOOR ARLINGTON, VA 22201-4714 | | | WILLIAMS, HOWARD L | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2819 | |

DATE MAILED: 07/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/693,644

Applicant(s)

JONES ET AL.

Examiner

Howard L. Williams

Art Unit

2819

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. ____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 052804.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

Claims 1-3, 5 rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1-3 and 6-11 of prior U.S. Patent No. 6,667,699. This is a double patenting rejection. Application claims 1, 2 and 6-10 directly correspond with patented claims 1, 2 and 7-11. Application claims 3 and 5 also are seen to recite the same invention as patented claims 3 and 6, regardless of the different dependency, as explained below.

Application claim 3 and patented claim 3 differ only in their respective chain of dependency; application claim 3 including application claim 2 by dependency whereas patented claim 3 depends directly from patented claim 1. While the issue that this "difference" precludes a reading of these claims as reciting the same invention, any consideration of a claim must look at what is recited. Application claim 2 and thus application claim 3 by its dependency recites that the dictionary is arranged so that at each search step a search tuple is loaded into the same address of the dictionary. Patented claim 3 recites that also recites that the number of times the same search tuple is loaded into the same search address of the dictionary is counted. Patent claim 3 is thus counting the event (loading of the same search into the same address of the dictionary) and would thus be presumed to have arrangements for this event to occur. Whereas application claim 2 provides that arrangements for this event are indeed provided. Accordingly application claim 3 and patented claim 3 are seen to be drawn to the same invention.

A similar analogy exists in comparing application claim 5 and patent claim 6. Application claim 5 depends from claim 4 which depends from claim 2 which depends from claim 1. Patent claim 6 depends from patent claim 1. However when the language of the respective claims is reviewed one finds that patent claim 6 provides for counting the event of the number of times the same search tuple is loaded into the same address of the dictionary. Ergo, the analysis comes down to the same comparison as before, does the inclusion of application claim 2 in application claim 5 by dependency provide some difference that would lead one to find that application claim 5 is not reciting the same invention as patent claim 6.

| | |
|--|---|
| 6. A system according to claim 1 <i>in which a further address in the dictionary is reserved to indicate the number of times a search tuple is repeated</i> | Italicized text matches that of application claim 4 |
| <i>and in which the run length encoder register means is arranged to count the number of times the same search tuple is loaded into the same address of the dictionary</i> | Italicized text matches that of application claim 3 |
| <i>and in which the further address varies in accordance with the size of the dictionary.</i> | Italicized text matches that of application claim 5 |

Application claim 7 and patent claim 8 both recite that dictionary entries hold 4 data elements and are therefor equal length and hold multiple data elements. Application claim 7 including application claim 6 is therefore seen to recite the same invention as patent claim 8.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claim 4 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 4 of U.S. Patent No. 6,667,699. Although the conflicting claims are not identical, they are not patentably distinct from each other because both of these claims except for their respective dependency read the same. It would have been obvious, however, to load the input to the dictionary to the same address to simplify the counting of matching search tuples.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.


Claims 1-10 rejected under 35 U.S.C. 103(a) as being unpatentable over Cooper (US 6,169,499 B1) in view of Welch et al. (US 6,121,901). Cooper ('499) discloses a data compression system which includes LZ textual substitution followed by means to provide run-length encoding. Cooper ('499) does not disclose the dictionary as a content addressable memory or CAM. See figures 3 and 4 and column 14 line 28 through column 15 line 12. Welch et al. discloses a data compression system which uses Lempel-Ziv type compression and further discloses that the dictionary may be implemented using a content address memory (col. 3, lines 50-55.) It would have been obvious use a CAM implemented dictionary such disclosed by Welch '901 in Cooper ('499) to provide for a simplification of the system, elimination of hashing to provide potential addresses for matches, and provide better throughput by the concurrent search and match determination of the CAM.

Application/Control Number: 10/693,644
Your Reference: 604-698
Art Unit: 2819

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Any inquiry concerning this communication should be directed to Howard L. Williams at telephone number 571.272.1815. The Patent and Trademark Office has a new central facsimile number for application specific correspondence intended for entry, it is 703-872-9306.

7/6/04
Voice 571.272.1815


Howard L. Williams
Primary Examiner
Art Unit 2819